

REMARKS

Claims 1, 5, 13 and 21 are amended herein and claims 10 and 18 had been cancelled without prejudice or disclaimer. New claims 22-25 are added herein. No new matter is added by the claim amendments or new claims. Claims 1-9, 11-17 and 19-25 are pending in the application.

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Machover et al. (U.S. Patent No. 5,650,583)(hereinafter "Machover") in view of Shimada (U.S. Patent No. 5,739,456)(hereinafter "Shimada"). With regard to previously cancelled claims 10 and 18, this rejection is moot. With regard to claims 1-9, 11-17 and 19-21, this rejection is respectfully traversed, as follows.

In addressing the remarks presented in Applicant's response to the first Office Action, the Examiner stated that Applicant argues that Machover does not show substituting ID data for newly edited pattern data. The Examiner then stated that Shimada shows substituting new pattern ID data. The Examiner further argued that "[i]t would have been obvious to one of ordinary skill in the art to include an identifier substituting means in the teachings of Machover to obtain a pattern editing (i.e., adding or deleting events) system having a way to identify each modified pattern" and "the motivation for making this modification would be to provide Machover with a way for users to easily recall (from storage) each modified pattern to allow use and re-use of user-customizable." (Office Action, pg. 3)

Each of independent claims 1, 5, 13 and 21 recites a system, device or method that is neither described, suggested nor rendered predictable by Machover or Shimada, alone or in the combination proposed by the Examiner (which combination is respectfully traversed as discussed below).

To further emphasize distinctions between the pending claims and the Machover and Shimada references, each of independent claims 1, 5, 13 and 21 is amended herein to recite means for, or processing that involves:

“storing pattern sequence data representing a sequence of said performance patterns, the pattern sequence data including identifiers of performance patterns in the sequence, the identifiers having a predefined attribute;” and

“modifying the pattern sequence data to substitute in the pattern sequence data, an identifier of the new performance pattern for the identifier of the performance pattern from which it was created with the same attribute as the predefined attribute” (underlines showing amendments to the claims)

As discussed below, neither Machover nor Shimada, alone or in the combination suggested by the Examiner, teach or suggest or render predictable storing pattern sequence data representing a sequence of performance patterns and substituting the identifier of a new performance pattern in stored pattern sequence data. The claims are further distinguished from the Machover and Shimada in that the claims, as amended, recite that the identifiers have a predefined attribute, where the same predefined attribute is an attribute of the identifier of the new performance pattern that is substituted in the pattern sequence data.

More specifically, the automatic performance system of claim 1 includes (among other features) a pattern sequence storage means for storing pattern sequence data representing a sequence of said performance patterns.” (Underlines added for emphasis.) A common and ordinary meaning of the term “sequence” is a continuous or connected series or succession. Thus, the reference to “sequence of performance patterns” would be understood to mean a continuous series or succession of performance patterns.

Claim 1 further recites that the pattern sequence data includes identifiers of performance patterns in the sequence, where the identifiers include a predefined attribute. In addition, the automatic performance system of claim 1 includes a “modification means for modifying the pattern sequence data to substitute in the pattern sequence data, an identifier of the new performance pattern for the identifier of the performance pattern from which it was created with the same attribute as the predefined attribute.” (Underlines added for emphasis.)

In contrast, Machover et al. do not describe or suggest storing data representing a sequence of performance patterns and then substituting in the stored pattern sequence data, the

identifier of a new performance pattern. The Examiner has acknowledged that “Machover does not explicitly teach the use of a modification means to ‘substitute the identifier of the new performance pattern for the identifier of the performance pattern form [sic, from] which it was created in the pattern sequence.’” (Office Action dated February 21, 2007, paragraph 2) In further contrast, it is also noted that Machover also does not describe substituting an identifier of a new performance pattern in a stored pattern sequence data, where the identifier of a new performance pattern has the same attribute as the predefined attribute of the identifier it substitutes.

However, the Examiner states that Machover does disclose that “the current pattern having been changed or added with a new pattern can be stored into the assign memory 2, and then the pattern stored in the assign memory 2 can be read out at any time by actuating any of the keys in the pattern assign area on the keyboard 1A” (citing col. 12, first paragraph of Machover). This reading of Machover does not address the above-noted feature of storing a sequence of performance patterns and substituting the identifier of a new performance pattern in a stored pattern sequence. Moreover, this reading of Machover does not address the above-noted distinction that the identifier of a new performance pattern has the same attribute as the predefined attribute of the identifier it substitutes.

The Examiner stated that Shimada teaches “allocating and specifying a unique pattern identifier to the user rhythm data pattern in the rhythm edit mode,” where the Examiner further stated that he is interpreting that to mean that once a pattern is edited by a user, a unique identifier is given (to the edited pattern). Furthermore, the Examiner argued that “by allocating and specifying the unique pattern identifier to the rhythm data, that Shimada is adding the identifier to the data and would therefore substitute new ID data for previous ID data.

However, the Examiner’s argument about Shimada does not address the above-noted distinctions between claim 1 and the Machover patent. Shimada does not modify a stored sequence of performance patterns (or any data) to substitute in that pattern sequence an identifier of a new performance pattern to replace the identifier of any other performance pattern in the original stored sequence. In addition, because Shimada does not teach to substitute an identifier in pattern sequence data with a new identifier in the pattern sequence data, Shimada also does not

use an identifier of a new performance pattern that has the same attribute as a predefined attribute of an identifier it substitutes in pattern sequence data. Accordingly, it is respectfully submitted that the proposed combination of Shimada with Machover (which combination is traversed as discussed below) would not have led to the invention recited in claim 1. The rejection of claim 1 is, therefore, respectfully traversed.

Furthermore, the Examiner states that “[i]t would have been obvious to one of ordinary skill in the art to include an identifier substituting means in the teachings of Machover to obtain a pattern editing (i.e., adding or deleting events) system having a way to identify each modified pattern” and “the motivation for making this modification would be to provide Machover with a way for users to easily recall (from storage) each modified pattern to allow use and re-use of user-customizable.” However, the Machover and Shimada references do not teach or suggest such purported advantages. Furthermore, the ability to identify a modified pattern would not lead one to the invention recited in claim 1, including “modification means for modifying the pattern sequence data to substitute in the pattern sequence data, an identifier of the new performance pattern for the identifier of the performance pattern from which it was created with the same attribute as the predefined attribute.” (underlines added for emphasis.) Identifying individual modified patterns with identification numbers for easy recall would provide no motivation or suggestion to modifying pattern sequence data to substitute an identifier in the sequence data (much less an identifier with the same attribute as the predefined attribute of the identifier it substitutes). Accordingly, there would have been no suggestion, motivation or other reason to modify the Machover system toward the claimed invention, even in view of the Shimada reference. Without such reason for modification, the Office Action fails to raise a prima facie case of obviousness.

The rejection of claim 1 is, therefore, respectfully traversed. For similar reasons, the rejection of each of claims 5, 13 and 21 is also respectfully traversed. Each of claims 5, 13 and 21 include features that are addressed by the above-discussed distinctions between claim 1 and the cited references. For example, claim 5 recites: “[a] programmable device ... including a computer readable medium storing programming code for controlling the device to perform processing comprising” among other features, “storing pattern sequence data representing a

sequence of said performance patterns, the pattern sequence data including identifiers of performance patterns in the sequence, the identifiers having a predefined attribute” and “modifying the pattern sequence data to substitute in the pattern sequence data, an identifier of the new performance pattern for the identifier of the performance pattern from which it was created with the same attribute as the predefined attribute.” Similarly, claim 13 recites “[a] method ... comprising,” among other features, “storing pattern sequence data representing a sequence of said performance patterns, the pattern sequence data including identifiers of performance patterns in the sequence, the identifiers having a predefined attribute” and “modifying the pattern sequence data to substitute in the pattern sequence data, an identifier of the new performance pattern for the identifier of the performance pattern from which it was created with the same attribute as the predefined attribute.” Also, claim 21 recites “[a] method ... comprising,” among other features, “storing pattern sequence data representing a sequence of said performance patterns, the pattern sequence data including identifiers of performance patterns in the sequence, the identifiers having a predefined attribute” and “modifying the pattern sequence data to substitute in the pattern sequence data, an identifier of the new performance pattern for the identifier of the performance pattern from which it was created with the same attribute as the predefined attribute.” Accordingly, at least for reasons similar to those discussed above with respect to claim 1, it is also respectfully submitted that the rejection of claims 5, 13 and 21 is traversed.

Claims 2-4 are each dependent on independent claim 1; claims 6-9, 11 and 12 are each dependent (directly or indirectly) on independent claim 5; claims 14-17, 19 and 20 are each dependent (directly or indirectly) on independent claim 13. Each of those dependent claims is patentably distinguished over the references of record, at least for reasons discussed above with respect to independent claims 1, 5 and 13 and for additional reasons apparent from the language of those dependent claims. Accordingly, the rejection of claims 2-4, 6-9, 11, 12, 14-17, 19 and 20 is also respectfully traversed.

New claims 22-25 are added to the application to further protect aspects of the invention. Neither the addition of new claims 22-25 nor the above-discussed amendments to claims 1, 5, 13 and 21 import new matter into the application. The subject matter of the amendments to claims

1, 5, 13 and 21 and the subject matter of new claims 22-25 is supported by the original application, at least with respect to paragraphs 0023, 0034, 0048, 0051, 0069 and 0075 of the original U.S. patent application. Such features are also apparent from the drawing of the original U.S. patent application.

Each of new claims 22-25 is believed to be further distinguished from the references of record, in that neither Machover nor Shimada, alone or in the combination suggested by the Examiner (which is traversed above), disclose or suggest an automatic performance system as recited in either claims 1, 5, 13 or 21, wherein the predefined attribute comprises at least one of a performance pattern or a style of the sequence of performance patterns.

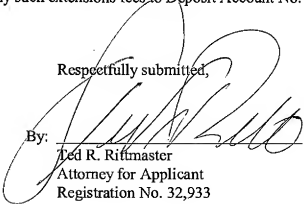
In view of the foregoing, it is submitted that the application is in condition for allowance. Re-examination and reconsideration of the application, as amended, are requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date: July 12, 2007
FOLEY & LARDNER LLP
Customer Number: 23392
Telephone: (310) 975-7963
Facsimile: (310) 557-8475

By: 
Ted R. Rifmaster
Attorney for Applicant
Registration No. 32,933